

REMARKS

Applicants will address each of the Examiner's objections and rejections in the order in which they appear in the Office Action.

Claim Objections

In the Office Action, the Examiner objects to Claims 3, 4 and 9-12 for informalities therein. Therefore, Applicants have amended each of these claims in accordance with the Examiner's suggestion and respectfully request that this objection be withdrawn.

Claim Rejections - 35 USC §103

The Examiner also rejects Claims 1-18 under 35 USC §103(a) as being unpatentable over Zhuang (US 6,602,395) in view of Hosokawa (US 6,747,405) and further in view of Hu (US 5,952,115). This rejection is respectfully traversed.

More specifically, the Examiner admits that Zhuang does not disclose the claimed feature of flowing a current for 0.8 to 3.0 seconds. The Examiner, however, contends that Hosokawa "teaches it is old and well known in the art that the electrolysis time is adjusted in accordance to the thickness of the electroluminescent layer being formed (see column 15, lines 42-56) for the purpose of preventing color mixture and change in chromaticity even if a viewing angle is change." Applicants respectfully disagree.

Initially, it is noted that Hosokawa does not disclose or suggest, either explicitly or implicitly, any concrete numerical range for flowing a current, much less the range specifically recited in the claims of the present application. In fact, Hosokawa does not recognize electrolysis time as a result-

effective variable. See MPEP §2144.05 (“A particular parameter must first be recognized as a result-effective variable, i.e. a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation.”) Hence, Hosokawa cannot be relied upon to support the Examiner’s contention that the claimed time period is mere routine experimentation. As explained, for example, on pages 2-3 and 7 of the present application, the time the current is applied is important for producing an electroluminescent element which is superior in luminescence properties and lifetime by forming a thin film with high controllability. Accordingly, Hosokawa cannot be relied upon by the Examiner to show that Applicants’ claimed period for flowing a current is an “optimum or workable range involves only routine skill in the art.”

The Examiner also seems to be contending that the description in Hosokawa of “to prevent color mixture and change chromaticity even if a viewing angle is changed” is a motivation or suggestion to modify Zhuang or combine Zhuang with Hosokawa. Applicants respectfully disagree. The Examiner’s alleged motivation is not directed to electrolysis time in Hosokawa. Instead, Hosokawa discusses preventing color mixture and change chromaticity with regard to the color changing layers being placed in contact with or very close to the organic luminescent medium (see e.g. Abstract in Hosokawa). Hence, there is no motivation for one skilled in the art to combine Zhuang with Hosokawa to arrive at the claimed invention.

The Examiner further contends that “Hu teaches that it is old and well known in the art to have adjusted the electroluminescent layer in the range of 6 nm (see column 27, lines 41-63) disclosed by the Applicant to obtain the applying current time for the purpose of enhancing thermal stability and operational stability.” The Examiner’s reference to Hu, however, is inappropriate.

The range of “at most 6.0 nm” in the present application is referring to surface roughness (see e.g. page 7, ln. 2 of the present application), not film thickness as in Hu. Further, the description in Hu regarding a purpose for providing enhanced thermal stability and operational stability is not directed to electrolysis time (see e.g. col. 2, lns. 46-49). Hence, Hu does not disclose or suggest the claimed invention, is not relevant to the claimed invention, and provides no motivation for combining the references to arrive at the claimed invention.

Accordingly, it is respectfully submitted that a prima facie case of obviousness has not been established. In order to combine references to arrive at the claimed invention, there must be some teaching, suggestion, or motivation to do so. See MPEP §2143.01. As explained above, there is no such teaching, suggestion or motivation to combine the cited references to arrive at the claimed invention. Applicants have shown herein that the Examiner’s alleged motivations are inappropriate and not supported by the cited references. Hence, it appears that the combination of references can only be the result of hindsight reconstruction, using the claims of the present application as a blue print. Since such hindsight reconstruction is improper, the rejection based thereon is improper and should be withdrawn.

Further, even if combined, the references fail to disclose or suggest the claimed invention.

Accordingly, it is respectfully requested that this rejection be withdrawn.

Conclusion


Therefore, it is respectfully submitted that the present application is in a condition for allowance and should be allowed.

If any fee should be due for this amendment, please charge our deposit account 50/1039.

Favorable reconsideration is earnestly solicited.

Respectfully submitted,

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